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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/629,746	07/31/2000	Louis Brown Abrams	D.N.7158	4116

7590 02/05/2003

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RECEIVED

FEB 11 2003

SHERIDAN, ROSS

EXAMINER

LEE, EDMUND H

ART UNIT

PAPER NUMBER

1732

DATE MAILED: 02/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/629,746

Applicant(s)

ABRAMS, LOUIS BROWN

Examiner

EDMUND H LEE

Art Unit

1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 November 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) 6, 10, 15, 34 and 41-53 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-9, 11-14, 16-33 and 35-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3, 10, 12, 14
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### DETAILED ACTION

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-41, drawn to a method for producing a molded article, classified in class 264, subclass 511.

II. Claims 42-53, drawn to a device, classified in class 425, subclass 127.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the apparatus as claimed can be used to practice another and materially different process such as a process that does not involve a flocked surface.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. If Group I is elected, then following species election is appropriate.

5. This application contains claims directed to the following patentably distinct species of the claimed invention:

a) those claims directed to fig 1.

b) those claims directed to fig 2.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is

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finally held to be allowable. Currently, claims 1-5, 8, 11-13, 16-21, 22-33, and 35-40 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

6. During a telephone conversation with D. Swartz on 1/21/03 a provisional election was made without traverse to prosecute the invention of species b, claims 1-5, 7, 8, 9, 11-13, 14, 16-21, 22-33, and 35-40. Affirmation of this election must be made by applicant in replying to this Office action. Claims 6, 10, 15, 34, 41, and 42-53 are

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withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

7. Claims 1-5, 7, 14, and 16-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "the layer of binder adhesive" (cl 1, ln 7) lacks antecedent basis in the claim.

The phrase "said adhesive binder" (cl 14, lns 1-2) lacks antecedent basis in the claim.

Clarification and/or correction is required.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-5, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masui et al (USPN 5053179) in view of EP 0280296 and JP 56058824 A. In regard to claim 1, Masui et al (USPN 5053179) teach the basic claimed process including a process for producing a multi-layered molded article (figs 3-5d); providing a transfer film/skin material (figs 3-5d); positioning the transfer film against an interior wall of a mold in which the article is made (figs 3-5d); molding a substrate such that resin contacts a surface of the film to form a molded article (figs 3-5d); cooling the

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mold (col 6, lns 15-18); and ejecting the molded article (col 6, lns 15-18). Masui et al also teach using a transfer film comprised of fabric or non-woven fabrics (col 5, lns 15-21). However, Masui et al does not teach using a film having a flocking layer, a release layer, and a layer of binder on an opposite side of the flocking; securing the release sheet to an interior of wall of a mold; and removing the release sheet from the transfer. EP 0280296 A2 teaches injection molding a multi-layered article having a layer of flocking thereon (abstract); and placing a film of flocking against an inner wall of a mold cavity surface and injecting a melted resin behind the flocking film (abstract). Masui et al and EP 0280296 A2 are combinable because they are analogous with respect to injection molding multi-layered articles having a decorative film thereon. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the flocking film of EP 0280296 A2 as the transfer film/skin material of the Masui et al in order to produce an aesthetically pleasing decorative article with ease and precision. JP 56058824 A teaches injection molding a multi-layered article having a layer of decoration (abstract; constitution; figs 1-6); using a decorative film having a tape layer, a decorative layer, an adhesive layer, and a layer of material compatible with the molding material (constitution; figs 1-6); securing the decorative film within the mold cavity by the tape layer (constitution; figs 1-6); injecting resin into the cavity (constitution; figs 1-6); and peeling of the tape layer from the molded article to obtain the product (constitution; figs 1-6). Masui et al and JP 56058824 A are combinable because they are analogous with respect to injection molding multi-layered articles having a decorative film thereon. Thus, it would have been obvious to one of ordinary

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skill in the art at the time the invention was made to redesign the components of the transfer film of Masui et al to include the above teachings of JP 56058824 A, i.e., the tape layer, adhesive layer, and layer of compatible material, and the step of removing the tape layer, in order to ensure the position of the film of Masui et al throughout the molding process and bonding of the film of Masui et al to the injected material. In regard to claim 2, the above combination of Masui et al and JP 56058824 A teach the use of an adhesive to affix the film to the mold cavity. In regard to claim 3, Masui et al does not teach using a vacuum to affix the film to the mold cavity. However, such is notoriously well-known in the molding art. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a vacuum to fix the film of Masui et al to the mold cavity in order to reduce wearing and dirtying the mold cavity. In regard to claim 4-5, Masui et al teach preventing resin from entering interstitial spaces of the transfer film (figs 3-5d); and forming a dam around the perimeter of the transfer (figs 3-5d). In regard to claims 16-17, the combined teachings of Masui et al and JP 56058824 A teach using a layer of binder adhesive; and using a plastic film. In regard to claim 18, Masui et al does not teach using a thermosetting polymer. The use of thermosets is well-known in the molding art in order to form a strong and durable product. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a thermosetting polymer in the process of Masui et al (modified) in order to strengthen the bond of the flocking to the resin substrate.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Masui et al (USPN 5053179) in view of EP 0280296 and JP 56058824 A as applied to claim 1



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and further in view of Braun et al (4790306). The above teachings of Masui et al , EP 0280296 A2 , and JP 56058824 A are incorporated hereinafter. Masui et al does not teach using a dam of adhesive built up around the periphery of the transfer film. Braun et al teach injection molding a filter device having a porous filtration element therein (figs 1-7); building up a barrier of material compatible with the frame of the filter device around the periphery of the filtration element in order to maintain the porosity of the filtration element (figs 1-7). Masui et al and Braun et al are combinable because they are analogous with respect to injection molding a composite article having a porous insert. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to build up a barrier like Braun et al around the periphery of the film of Masui et al (modified) in order to ensure the integrity of the film of Masui et al.

11. Claims 8 and 11-13, 14, and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masui et al (USPN 5053179) in view of Higashiguchi (USPN 4292100). In regard to claim 8, Masui et al (USPN 5053179) teach the basic claimed process including a process for producing a multi-layered molded article (figs 3-5d); providing a transfer film/skin material (figs 3-5d); positioning the transfer film against an interior wall of a mold in which the article is made (figs 3-5d); molding a substrate such that resin contacts a surface of the film to form a molded article having a film permanently bonded to the substrate (figs 3-5d); and forming a barrier around the periphery of the film (figs 3-5d). Masui et al also teach using a transfer film comprised of fabric or non-woven fabrics (col 5, lns 15-21). However, Masui et al does not teach coating a release sheet with a release adhesive; flocking flock into the release

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adhesive; and affixing the release sheet to the interior surface of a mold. Higashiguchi (USPN 4292100) teaches a method of preparing a flock transfer film (abstract; figs 1-5); coating a release sheet with a release adhesive (figs 1-5); and flocking flock into the release adhesive by imbedding a first end of the flock into the release adhesive to result in at least one pattern of flock arranged to form a predetermined design adhered to the release sheet (figs 1-5). Masui et al and Higashiguchi are combinable because they are analogous with respect to forming a decorative article. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the flocking film of Higashiguchi as the transfer film/skin material of the Masui et al in order to produce an aesthetically pleasing decorative article with ease and precision. In regard to claim 11, Masui et al teach injection molding molten resin into the mold (figs 3-5d). In regard to claim 12, Masui et al does not teach using two injection pressures. However, such is well-known in the molding art in order to ensure high quality composite articles. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to inject the resin of Masui et al at the claimed two pressures in order to achieve the above result. In regard to claim 13, Masui et al does not teach using a resin with a melting point lower than the release adhesive. Such is a mere obvious matter of choice dependent on the desired final product and material availability and of little patent consequence to the claimed process since it is not a manipulative feature or step of the claimed process. Further, such material is well-known in the molding art. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a resin with a melting point lower than

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the release adhesive in order to ensure the integrity of the flocking. In regard to claim 14, the combination of Masui et al and Higashiguchi teach molding over an adhesive binder, and a surface being a contoured surface. In regard to claim 19, the combination of Masui et al and Higashiguchi teach a film that is a binder adhesive which adhesive holds the transfer to the article. In regard to claim 20, Masui et al does not teach a film that crosslinks with the molded article. It is well-known in the molding art to bond a preform to a shaping material by crosslinking. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use crosslinkable material in the process of Masui et al (modified) in order to strengthen the bond of the flocking to the resin substrate. In regard to claim 21, Masui et al does not teach using a thermosetting polymer as the plastic film. The use of thermosets is well-known in the molding art in order to form a strong and durable product. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a thermosetting polymer in the process of Masui et al (modified) in order to strengthen the bond of the flocking to the resin substrate.

12. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Masui et al (USPN 5053179) in view of Higashiguchi (USPN 4292100) as applied to claim 8 and further in view of Braun et al (USPN 4790306). The above teachings of Masui et al and Higashiguchi are incorporated hereinafter. Masui et al does not teach using a dam of adhesive built up around the periphery of the transfer film. Braun et al teach injection molding a filter device having a porous filtration element therein (figs 1-7); building up a barrier of material compatible with the frame of the filter device around the periphery of

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the filtration element in order to maintain the porosity of the filtration element (figs 1-7). Masui et al and Braun et al are combinable because they are analogous with respect to injection molding a composite article having a porous insert. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to build up a barrier like Braun et al around the periphery of the film of Masui et al (modified) in order to ensure the integrity of the film of Masui et al.

13. Claims 22-33 and 35-40 rejected under 35 U.S.C. 103(a) as being unpatentable over JP 560855524 A in view of Abrams (WO 90/09289). In regard to claim 22, JP 560855524 A teaches the basic claimed process including a method for producing a molded article (abstract; figs 1-6); providing a decorative insert (abstract; figs 1-6); positioning the insert in a part of a mold (abstract; figs 1-6); introducing a resin into the mold after closure of the mold while the flocked surface is positioned in the closed mold (abstract; figs 1-6); and after solidification of the resin, removing a molded article comprising the insert and the solidified resin from the mold (abstract; figs 1-6).

However, JP 560855524 A does not teach using a flocked surface. Abrams teaches a flock appliqué that can be applied to any type of material (pg 14, lns 29-31). JP 560855524 A and Abrams are combinable because they are analogous with respect to decorating a substrate with an insert/appliqué. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the flock appliqué of Abrams for the insert of JP 560855524 A in order to diversify the product line of JP 560855524 A. In regard to claims 23-33 and 35-40, JP 560855524 A teaches cooling the mold to cause solidification of the resin (abstract; figs 1-6)--as a note, such

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is inherent in order to produce a viable product; maintaining the insert stationary in the closed mold during the introducing step (abstract; figs 1-6); using an insert comprised of a dimensionally stable sheet, a decoration; a first release adhesive attaching the decoration to the dimensionally stable sheet, and a permanent binder adhesive coating a surface of the decoration (abstract; figs 1-6); contacting the dimensionally stable sheet with a surface of the closed mold (abstract; figs 1-6); using a second release adhesive positioned on an opposite side of the dimensionally stable sheet from the first release adhesive to locate the insert in position inside the mold (abstract; figs 1-6); introducing by injection molding (abstract; figs 1-6); and removing the dimensionally stable sheet from the molded article (abstract; figs 1-6). However, JP 560855524 A does not teach using a flocked surface comprised of multiple colors of flock; using resilient flock; using a flock that is at least one of rayon, nylon, and polyester; electrostatically depositing the flock onto an adhesive-coated surface to form the flocked surface; using a flocked surface comprising an adhesive coating lower ends of the flock; maintaining the flocked surface by using a vacuum; using a flocked surface having dimensionally stable sheet, a plurality of flock fibers, a first release adhesive attaching the plurality of flock fibers to the dimensionally stable sheet, and a permanent binder adhesive coating lower ends of the plurality of flock fibers; using a first release adhesive having a melting point higher than a melting point of the resin; introducing by RIM, blow molding, rotational molding, or transfer molding; introducing a first resin at a first pressure, and a second resin at a second pressure wherein the first pressure is less than the second pressure; and using a permanent adhesive of thermal setting adhesive or water based latex. Abrams

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teaches using a flocked surface comprised of multiple colors of flock (pg 12, ln 17-18); using resilient flock (pg 6, lns 27-30); using a flock that is at least one of rayon, nylon, and polyester (pg 6, lns 27-30); electrostatically depositing the flock onto an adhesive-coated surface to form the flocked surface (pg 9, lns 20-22); using a flocked surface comprising an adhesive coating lower ends of the flock (pg 6, ln 27-pg 7, ln 23); using a flocked surface having dimensionally stable sheet, a plurality of flock fibers, a first release adhesive attaching the plurality of flock fibers to the dimensionally stable sheet, and a permanent binder adhesive coating lower ends of the plurality of flock fibers (pg 6, ln 27-pg 7, ln 23); and using a permanent adhesive of thermal setting adhesive or water based latex (pg 11, ln 17-pg 12, ln 12). JP 560855524 A and Abrams are combinable because they are analogous with respect to decorating a substrate with an insert/appliqué. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the flock appliqué of Abrams for the insert of JP 560855524 A in order to diversify the product line of JP 560855524 A. In regard to maintaining the flocked surface by using a vacuum, it is well-known in the molding art to position an insert within a mold by vacuum. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to maintain the position of the flocked surface of JP 560855524 A (modified) by vacuum instead of adhesive in order to eliminate adhesive residue from forming on the mold surface. In regard to using a first release adhesive having a melting point higher than a melting point of the resin, such is well-known in the molding art in order to prevent bonding between a carrier, an insert, and a molded substrate. Thus, it would have been obvious to one of

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ordinary skill in the art at the time the invention was made to use a first release adhesive with a melting point higher than a melting point of the resin in order to achieve the above result. In regard to introducing by RIM, blow molding, rotational molding, or transfer molding, such are well-known in the molding art for their ease and cost. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to redesign the apparatus of JP 560855524 A to form the article of JP 560855524 A by any of the claimed introducing methods in order to minimize production costs without compromising quality. In regard to introducing a first resin at a first pressure, and a second resin at a second pressure wherein the first pressure is less than the second pressure, such is well-known in the molding art in order to prevent damage to an insert or preform. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to introduce a first resin at a first pressure into the mold of JP 560855524 A, and a second resin at a second pressure into the mold of JP 560855524 A, wherein the first pressure is less than the second pressure, in order to prevent damage to the flocked surface of JP 560855524 A (modified).

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Duffy (USPN 5909021) teaches injecting a first resin at a first pressure and then injecting a second resin at a second pressure wherein the first pressure is less than the second pressure. Both JP 58062027 A and JP 59106944 A teaches maintaining the position of flocked surface on a molding surface by vacuum.

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15. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Examiner Edmund Lee whose telephone number is (703) 305-4019. The examiner can normally be reached on Monday-Wednesday and Friday from 8:00 AM to 4:00 PM. The fax number for Examiner Edmund Lee is (703) 872-9615

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jan H. Silbaugh, can be reached on (703) 308-3829.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

EHL

January 27, 2003

  
Edmund Lee 1/27/03  
Patent Examiner, AU 1732



<b>FORM PTO-1449</b> U.S. DEPARTMENT OF COMMERCE, PATENT AND TRADEMARK OFFICE  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use several sheets if necessary)	<b>ATTY. DOCKET</b> NO.: 7158	<b>SERIAL NO.:</b> 09/629,746
	<b>APPLICANT:</b> Abrams, Louis Brown	
	<b>Filing Date:</b> 07/31/2000	<b>Group:</b> 1732

**U.S. PATENT DOCUMENTS**

Examiner Initial	Document Number	Date	Name of Inventor	Class	Subclass	Filing Date If Appropriate

**FOREIGN PATENT DOCUMENTS**

Examiner Initial	Document Number	Date	Country	Class	Subclass	Translation	Yes	No

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

	Film Insert Molding Technology. Mark Matsco, Patrick Griffin. 1997.
	Lexan In-Mold Films. GE Structured Products. Jan. 1999.

<b>EXAMINER</b>	<b>DATE CONSIDERED</b> 6/24/02
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**EXAMINER:** Initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE  INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	ATTY. DOCKET NO. 4811-10	SERIAL NO. 09/629,746
	APPLICANT ABRAMS	
	FILING DATE July 31, 2000	GROUP ART 1732

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROP.
EA	AA	4,790,306	12/13/88	BRAUN et al.	128	206.12	
MA	AB	5,053,179	10/1/91	MASUI et al.	264	257	

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
							YES	NO
EA	AC	88102819.5	2/25/88	EPO	<del>004H</del>	<del>11/00</del>		X

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.):


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 TO ADDITIONAL ROOM

EXAMINER G. Lee	DATE CONSIDERED 1/23/03
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FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEINFORMATION DISCLOSURE STATEMENT  
(Use several sheets if necessary)ATTY. DOCKET NO.  
4811-10SERIAL NO.  
09/629,746APPLICANT  
ABRAMSFILING DATE  
July 31, 2000GROUP ART  
1732

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROP.
78	AA	3,989,869	11/02/76	Neumaier et al.	428	254	
	AB	4,160,851	07/10/79	Lienert et al.	427	379	
	AC	4,314,955	02/09/82	Boden et al.	264	51	
	AD	4,539,166	09/03/85	Richartz et al.	264	45.1	
	AE	4,582,658	04/15/86	Reichmann et al.	264	45.1	
	AF	4,797,320	01/10/89	Kopp et al.	428	316.6	
	AG	4,810,321	03/07/89	Wank et al.	156	244.23	
	AH	4,812,247	03/14/89	Fahner et al.	252	511	
	AI	5,009,950	04/23/91	Wagner et al.	428	290	
	AJ	5,043,375	08/27/91	Henning et al.	524	372	
	AK	5,154,871	10/13/92	Wagner et al.	264	255	
	AL	5,274,039	12/28/93	Sirinyan et al.	525	130	
	AM	6,113,149	09/05/00	Dukat	283	91	

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLA SS	SUB CLASS	TRANSLATION	
							YES	NO
78	AN	W/O 02/07959 A1	01/31/02	PCT				

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FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE  INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	ATTY. DOCKET NO. 4811-10	SERIAL NO. 09/629,746
	APPLICANT ABRAMS	
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## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROP.
2X	AA	1,905,989	04/25/33	Safir et al.	428	189	
	AB	2,636,837	04/09/53	Summers	154	123	
	AC	3,657,060	04/18/72	Haigh	161	73	
	AD	3,775,205	11/27/73	Hermann et al.	156	72	
	AE	3,793,050	02/19/74	Mumpower, Jr.	117	17.5	
	AF	3,816,060	06/11/74	Koskolos	431	350	
	AG	3,816,211	06/11/74	Haigh	156	309	
2X	AH	3,956,552	05/11/76	Geary	428	88	
not included	AI	<del>3,989,869</del>	<del>Nov., 1976</del>	<del>Neumaier et al.</del>	<del>428</del>	<del>254</del>	
2X	AJ	4,018,956	04/19/77	Casey	428	86	
	AK	4,034,134	07/05/77	Gregorian et al.	428	86	
	AL	4,035,532	07/12/77	Gregorian et al.	428	90	
	AM	4,102,562	07/25/78	Harper et al.	350	105	
	AN	4,142,929	03/06/79	Otomine et al.	156	72	
not included	AO	<del>4,160,851</del>	<del>Jul., 1979</del>	<del>Lienert et al.</del>	<del>427</del>	<del>379</del>	
2X	AP	4,201,810	05/06/80	Higashiguchi	428	90	
	AQ	4,269,885	05/26/81	Mahn	428	216	
	AR	4,273,817	06/16/81	Matsuo et al.	428	90	
	AS	4,282,278	08/04/81	Higashiguchi	428	90	
	AT	4,292,100	09/29/81	Higashiguchi	156	72	
2X	AU	4,314,813	02/09/82	Maskai	8	468	

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*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROP.
<del>not included</del>	AV	4,314,955	Feb., 1982	Boden et al.	264	51	
3/8	AW	4,340,623	07/20/82	Justus	427	361	
↓	AX	4,369,157	01/18/83	Conner	264	246	
	AY	4,385,588	05/31/83	Bennetot	118	638	
	AZ	4,388,134	06/14/83	Long et al.	156	248	
	BA	4,396,662	08/02/83	Higashiguchi	428	90	
↓	BB	4,405,401	09/20/83	Stahl	156	248	
3/8	BC	4,423,106	12/27/83	Mahn	428	207	
<del>not included</del>	BD	4,530,166	Sept., 1985	Richartz et al.	264	45.1	
3/8	BE	4,574,018	03/04/86	Masuda et al.	156	72	
<del>not included</del>	BF	4,582,658	Apr., 1986	Reichmann et al.	264	45.1	
3/8	BG	4,652,478	04/24/87	Maii	428	43	
↓	BH	4,668,323	05/26/87	Lenards et al.	156	242	
	BI	4,681,791	07/21/87	Shibahashi et al.	428	96	
	BJ	4,687,527	08/18/87	Higashiguchi	156	72	
	BK	4,741,791	05/03/88	Howard et al.	156	72	
3/8	BL	4,793,884	12/27/88	Horikiri	156	247	
<del>not included</del>	BM	4,797,320	Jan., 1989	Kopp et al.	428	316.6	
<del>not included</del>	BN	4,810,321	Mar., 1989	Wank et al.	156	244.23	
3/8	BO	4,810,549	03/07/89	Abrams et al.	428	88	
<del>not included</del>	BP	4,812,247	Mar., 1989	Fahner et al.	252	511	

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*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROP.
<i>32</i>	BQ	4,980,216	12/25/90	Rompp	428	90	
<i>32</i>	BR	5,008,130	04/16/91	Lenards	427	206	
<del>not included</del>	BS	5,009,950	Apr., 1991	Wagner et al.	428	290	
<del>not included</del>	BT	5,043,375	Aug., 1991	Henning et al.	524	372	
<i>32</i>	BU	5,047,103	09/10/91	Abrams et al.	156	72	
<i>32</i>	BV	5,108,530	04/28/92	Niebling, Jr. et al.	156	245	
<del>not included</del>	BW	5,154,871	Oct., 1992	Wagner et al.	264	255	
<i>32</i>	BX	5,198,277	03/30/93	Hamilton et al.	428	92	
	BY	5,207,851	05/04/93	Abrams et al.	156	230	
	BZ	5,217,563	06/08/93	Niebling et al.	156	382	
	CA	5,217,781	06/08/93	Kuipers	428	85	
<i>32</i>	CB	5,248,536	09/28/93	Du Katz	428	40	
<del>not included</del>	CC	5,274,039	Dec., 1993	Sirnyan et al.	525	136	
<i>32</i>	CD	5,346,746	12/13/94	Abrams	428	195	
	CE	5,350,474	09/27/94	Yamane	156	240	
	CF	5,489,359	02/06/96	Yamane	156	540	
	CG	5,597,637	01/28/97	Abrams et al.	428	90	
	CH	5,622,587	04/22/97	Barthelma	156	251	
	CI	5,693,400	12/02/97	Hamilton et al.	428	89	
	CJ	5,762,379	06/09/98	Salmon et al.	283	91	
<i>32</i>	CK	5,766,397	06/16/98	Jones	156	230	
<i>32</i>	CL	5,858,156	01/12/99	Abrams et al.	156	230	

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*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROP.
<i>rx</i>	CM	5,900,096	05/04/99	Zemel	156	233	
	CN	5,912,065	06/15/99	Kukoff	428	195	
	CO	5,981,009	11/09/99	Iacono et al.	428	40.1	
	CP	6,010,764	01/04/00	Abrams	428	90	
	CQ	6,083,332	04/04/00	Abrams	156	72	
	CR	6,102,686	08/15/00	Eschenfelder	425	388	
	CS	6,110,560	08/29/00	Abrams	428	90	
not included	CT	6,113,149	Sept., 2000	Dukat	283	91	
<i>rx</i>	CU	6,146,485	11/14/00	Iacono et al.	156	230	
	CV	6,170,881	01/09/01	Salmon et al.	283	91	
	CW	6,171,678	01/09/01	Holeschovsky et al.	428	97	
	CX	6,202,549	03/20/01	Mitsam et al.	101	27	
	CY	6,224,707	05/01/01	Lion	156	230	
	CZ	6,257,866	07/10/01	Fritz et al.	425	387.1	
	DA	6,264,775	07/24/01	Holeschovsky et al.	156	72	
	DB	6,277,312	08/21/01	Hansen et al.	264	132	
	DC	6,296,908	10/02/01	Reihs et al.	427	393.5	
	DD	6,299,715	10/09/01	Langsdorf et al.	156	72	
	DE	6,387,472	05/14/02	Reck et al.	428	195	
	DF	6,428,877	08/06/02	Suss et al.	428	195	
<i>rx</i>							

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## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLA SS	SUB CLASS	TRANSLATION	
							YES	NO
	DG	1 480 860	05/12/07	France				X
3A	DH	1 447 049	08/25/76	Great Britain				
2A	DI	WO 79/01146	12/27/79	PCT				
	DJ	2 210 149	07/05/74	France				X
2A	DK	JP 356058824A	05/22/81	Japan			X	
2A	DL	2 065 031A	06/24/81	Great Britain				
1	DM	JP 359115885A	04/04/84	Japan			X	
1	DN	2 126 951 A	04/04/84	Great Britain				
	DO	210304	04/02/87	EP				
2A	DP	WO 89/01829	03/09/89	PCT				
	DQ	2 659 094	03/02/90	France				X
not included	DR	9002623	Mar., 1990	France				
2A	DS	DE019734316A1	02/04/99	Germany			X	
2A	DT	JP02000084977	03/28/00	Japan			X	
not included	DU	PCT/US01723195	Jan., 2002	PCT				

## OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

2A	DV	Stahls; New Product Bulletin
2A	DW	Aqion Technologies, LLC; The Most Advanced Antimicrobial Silver Delivery System

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✓	DX	Bayer Plastics Division Press Release, <i>Wheel Covers, Center Caps Become Revolving Art Forms with New Film Insert Molding Technology</i> .
	DY	Sonics & Materials, Inc., <i>Chart II Compatability of Thermoplastics</i>
	DZ	Shaner; <i>Advanced Molding Processes: Low Pressure Molding/Low-High Pressure Molding for Interior Trim</i> , 1997
	EA	Snyder; <i>Fabric Molding Shows Promise in Automotive</i> , 1999
	EB	Takatori; <i>Dieprest In-mold Laminate Technology</i> , 1999
✓	EC	Defosse; <i>"Systems Approach Gives Blow Molders Big Edge</i> , 2000

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**Notice of References Cited**

Application/Control No.

09/629,746

Applicant(s)/Patent Under  
Reexamination  
ABRAMS, LOUIS BROWN

Examiner

EDMUND H LEE

Art Unit

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**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-5909021	06-1999	DUFFY	200/514
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N	JP 58062027 A	04-1983	JP	_____	_____
	O	JP 59106944 A	06-1984	JP	_____	_____
	P	WO 90/09289	08-1990	WIPO	ABRAMS	_____
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.